

FIG. 1

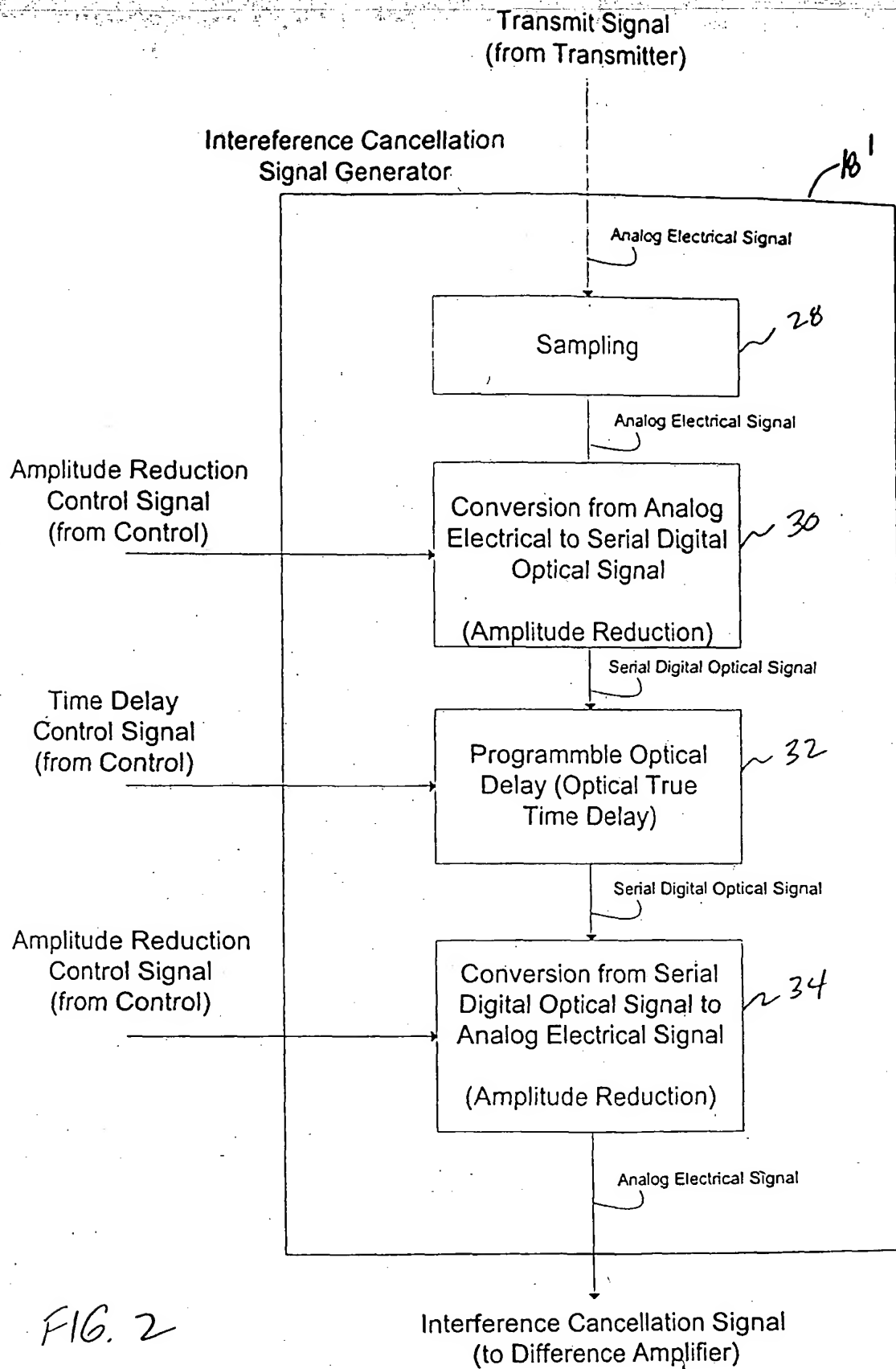


FIG. 2

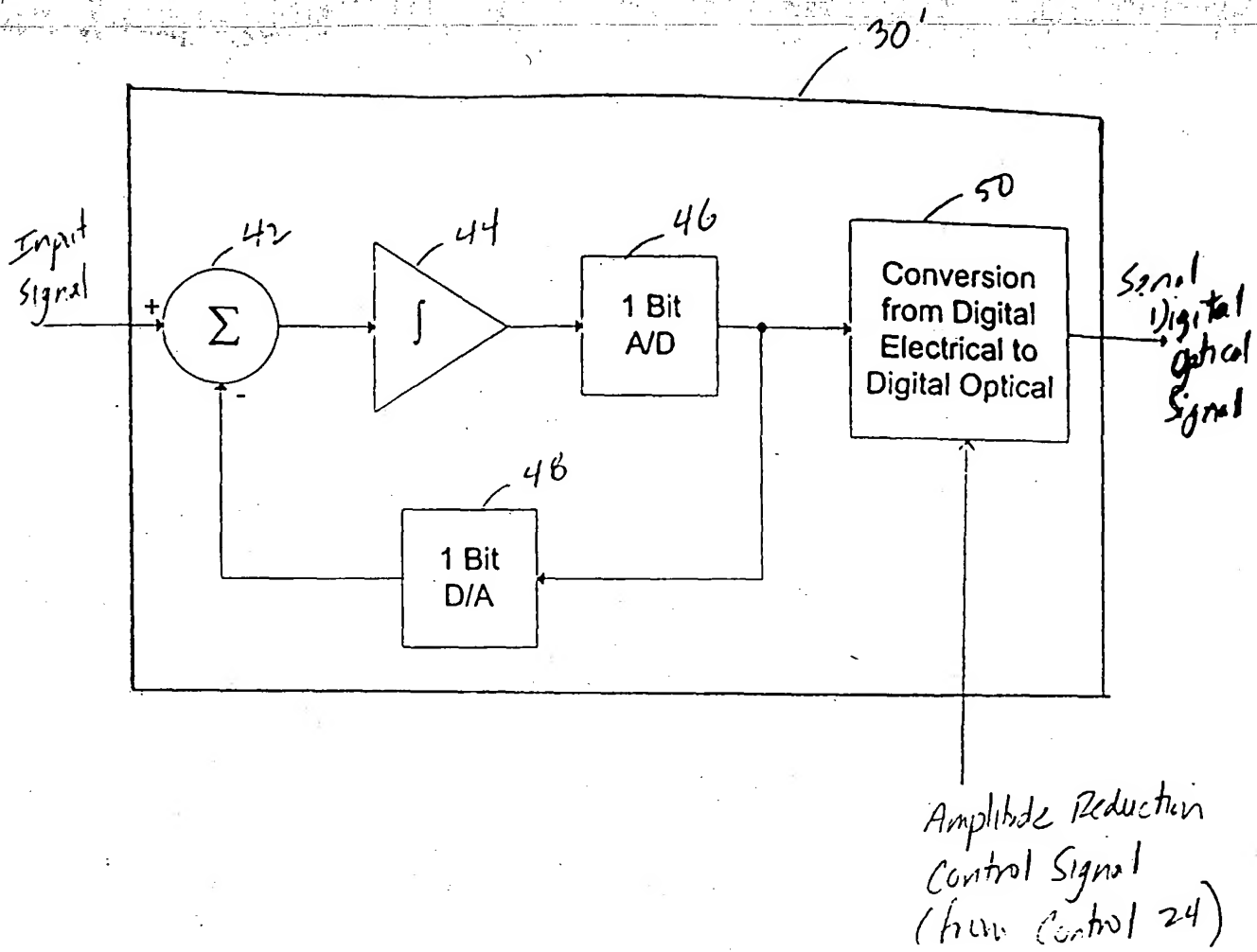


FIG. 3A

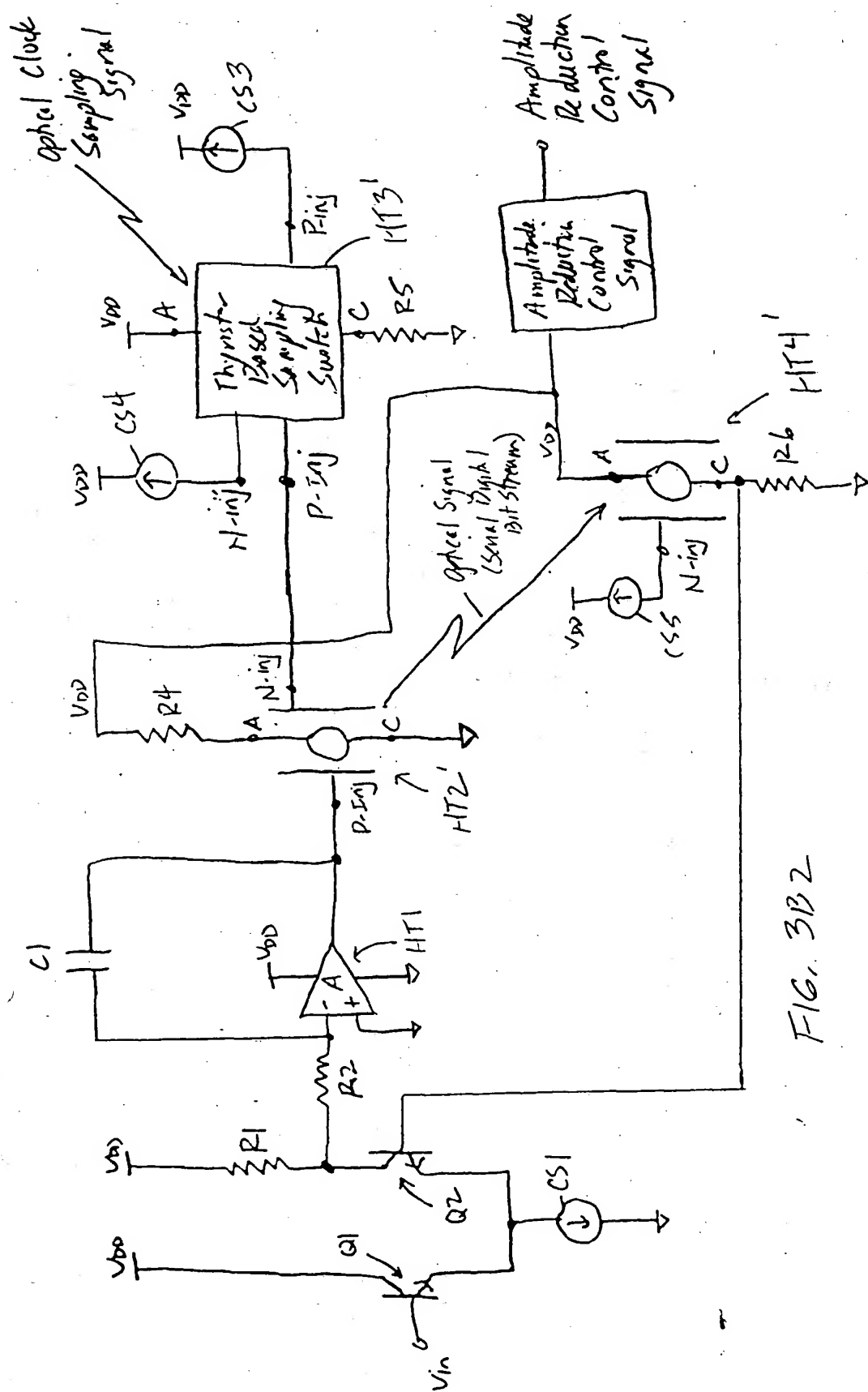
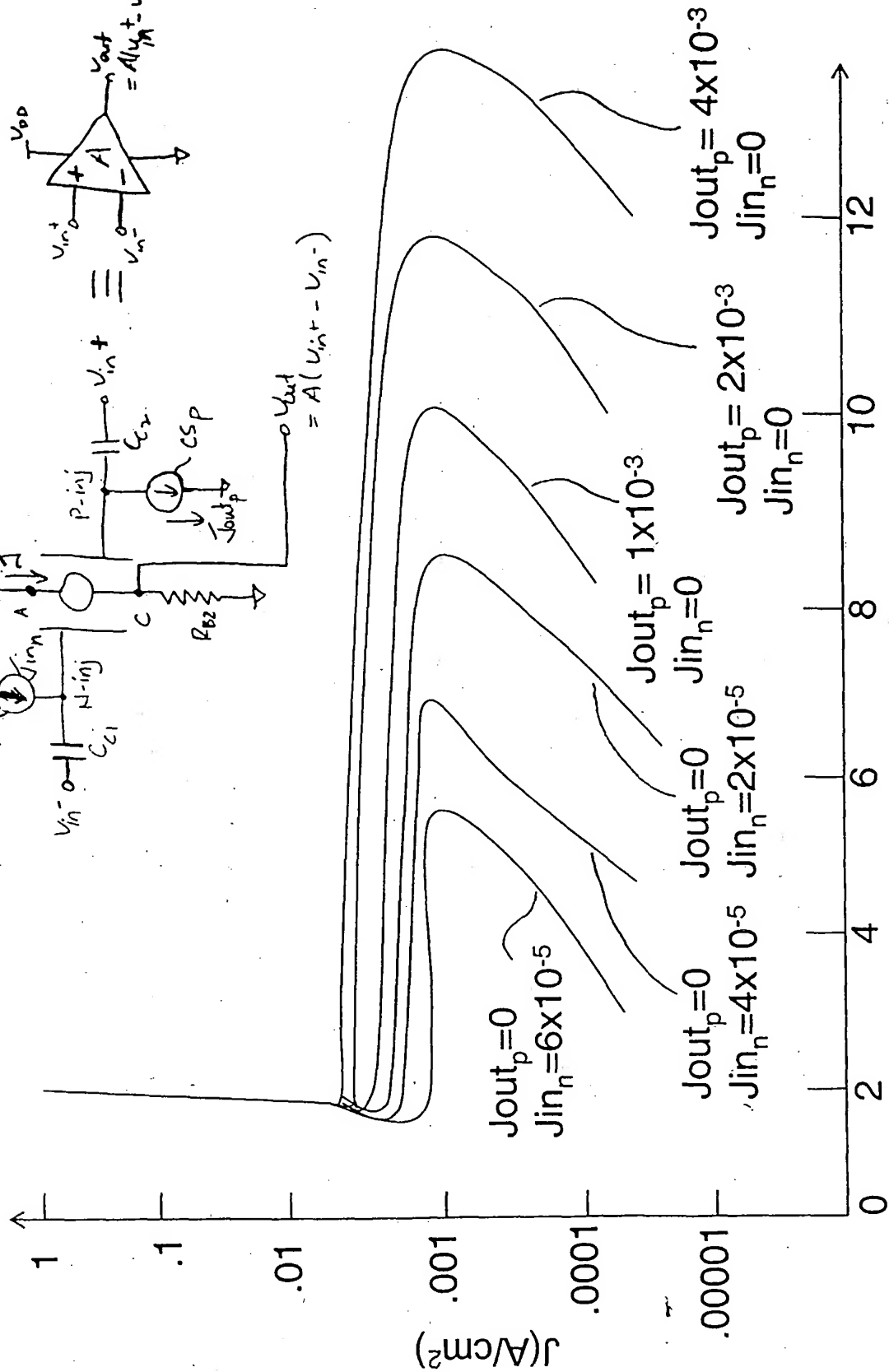
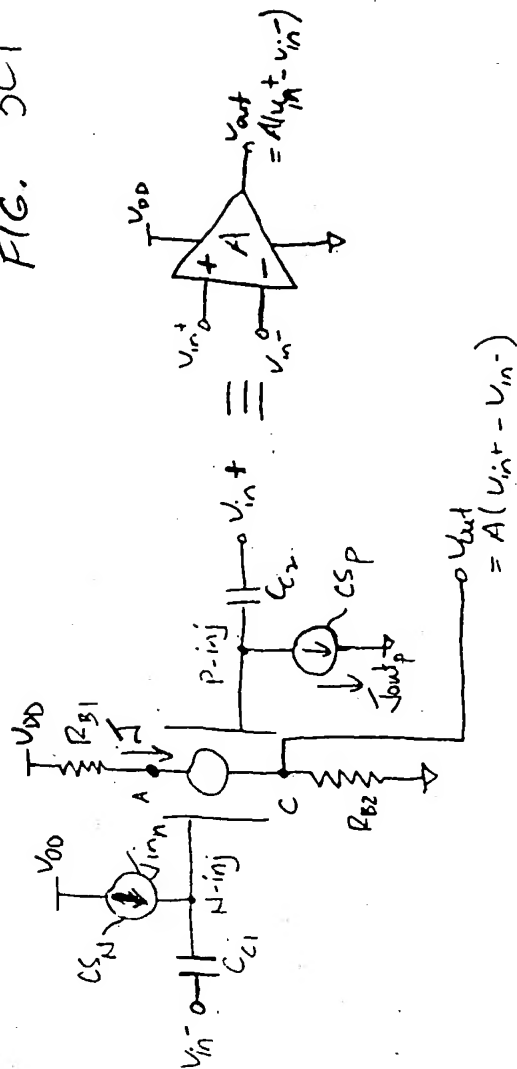


FIG. 3C1



$V_{sw}(V)$

FIG. 3C2

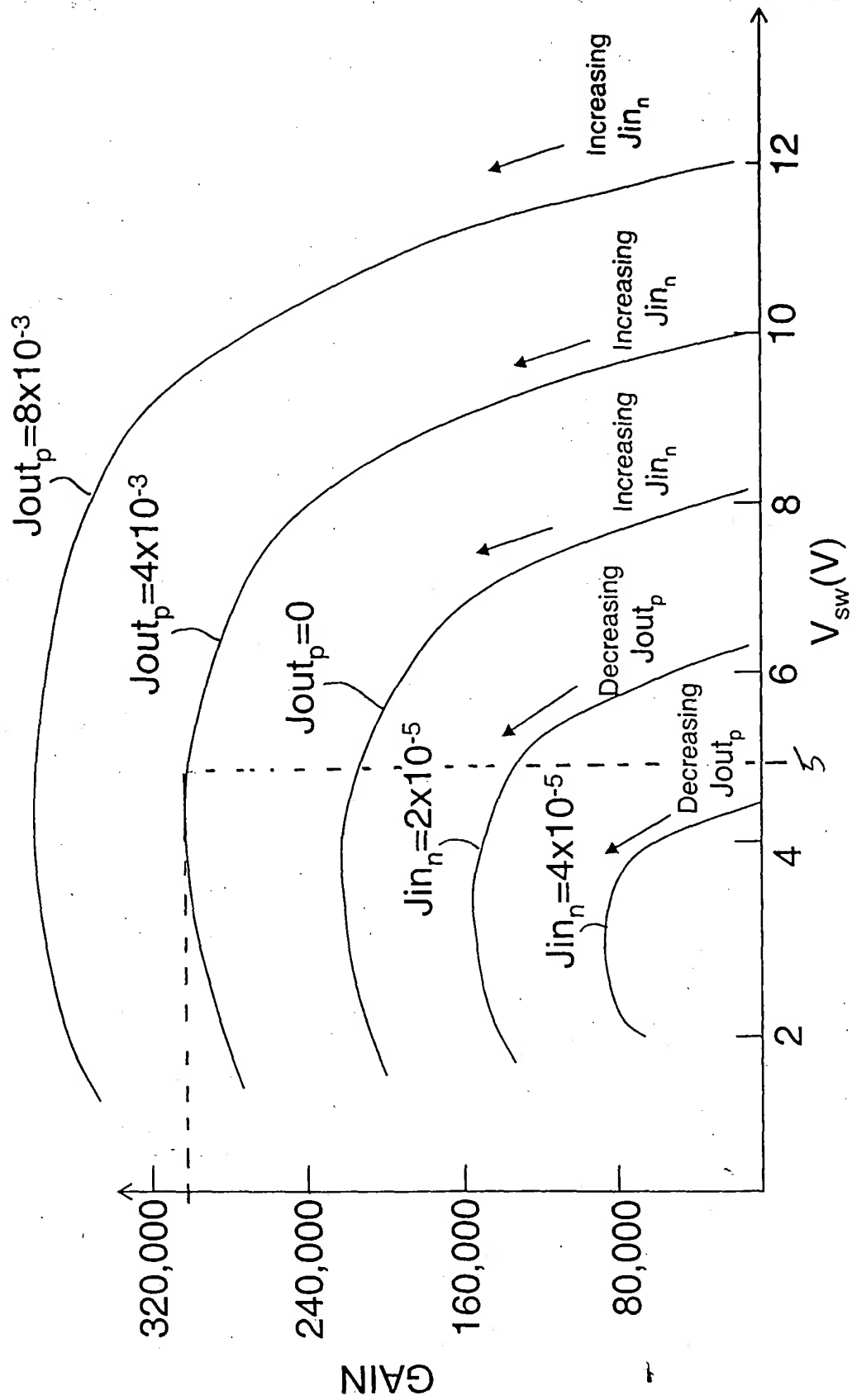


FIG. 3C3

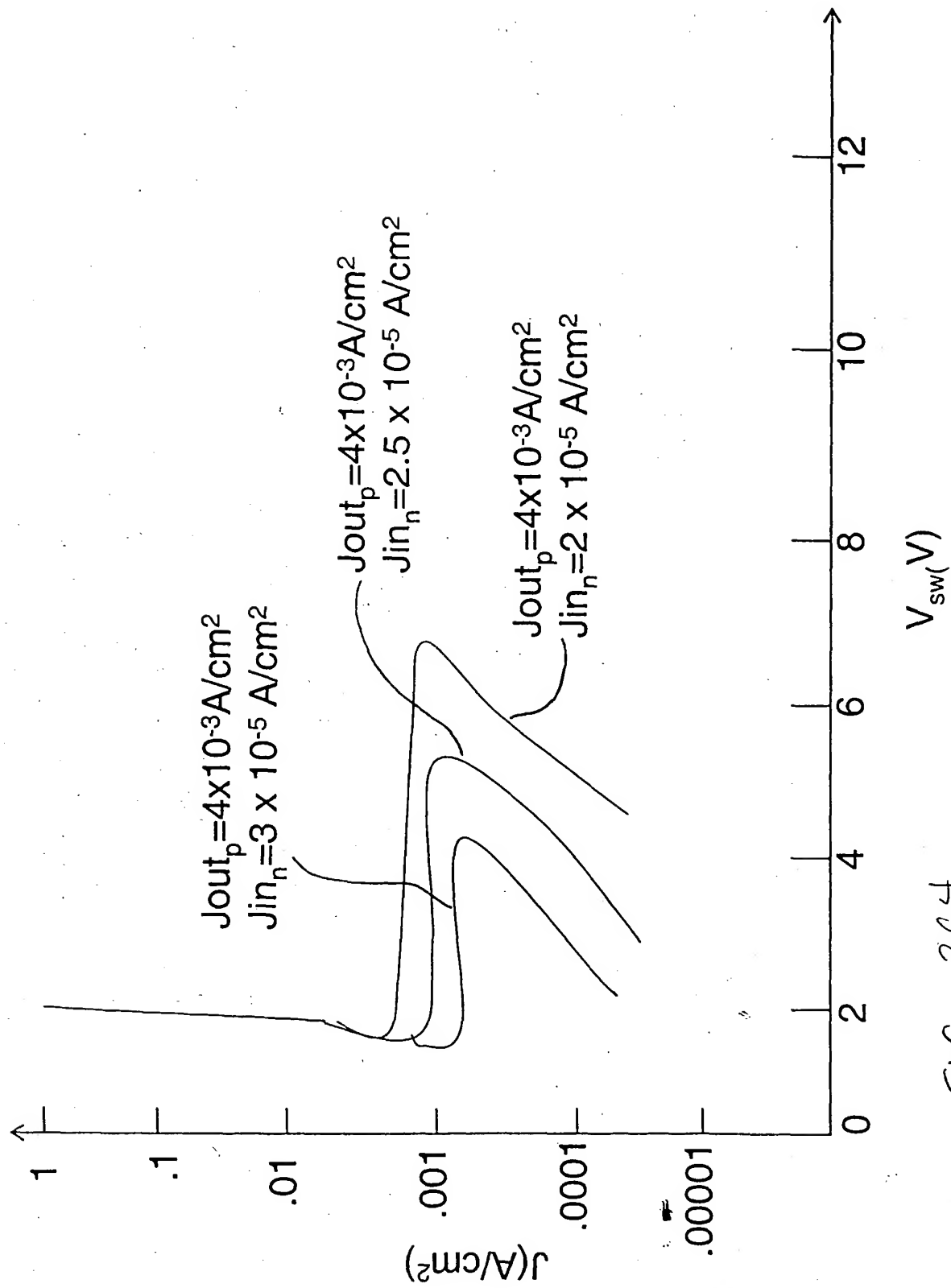
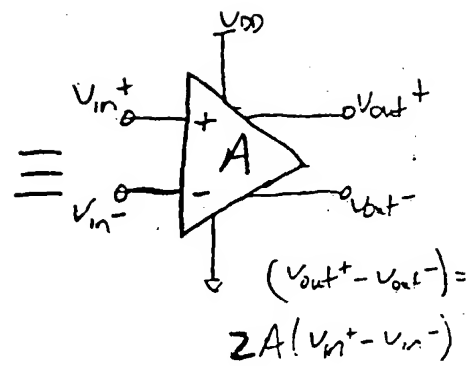
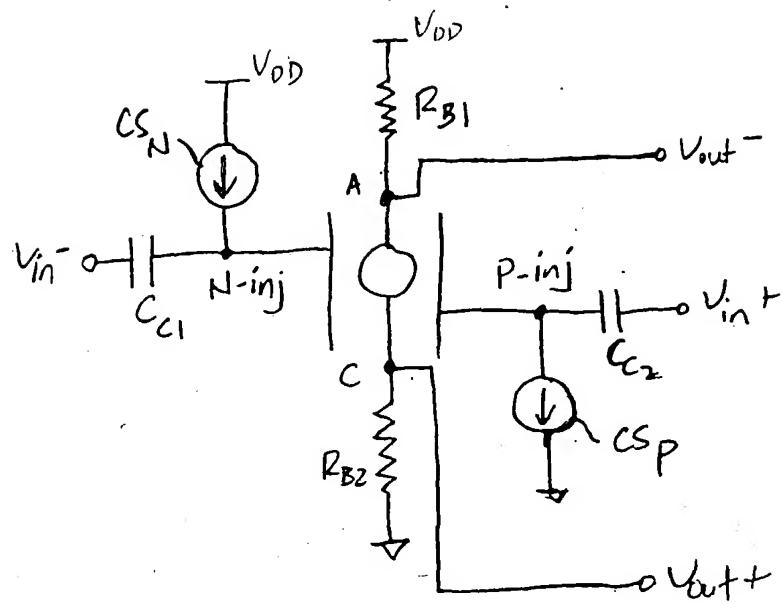


FIG. 3C4



$$(V_{out+} - V_{out-}) = 2A(V_{in+} - V_{in-})$$

FIG. 3C5

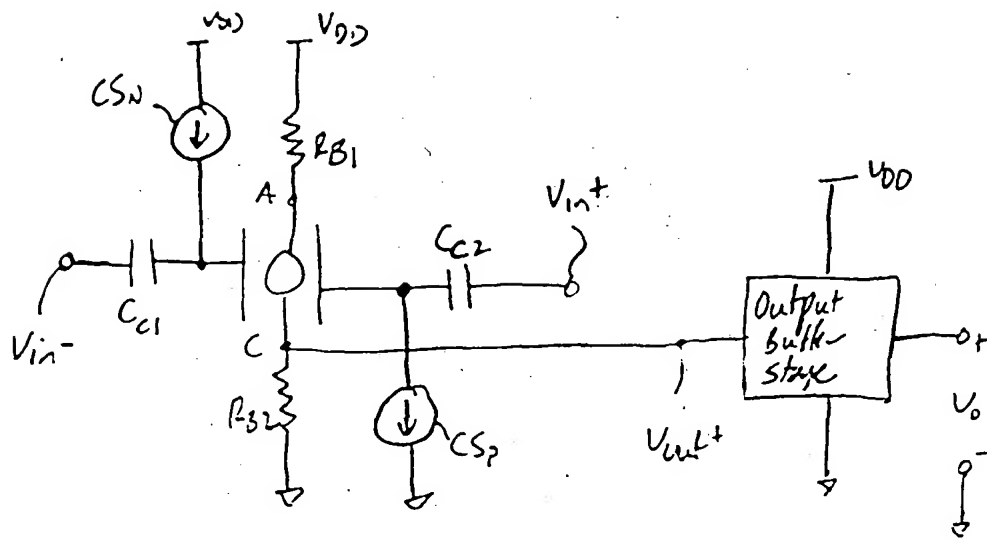
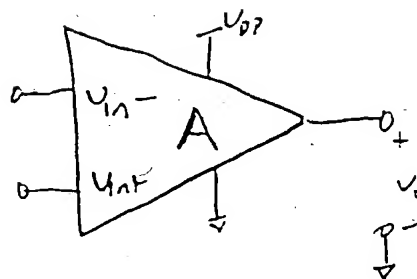


FIG. 3C6 where $V_o \approx -A(V_{in+} - V_{in-})$



where $V_o \approx -A(V_{in+} - V_{in-})$

FIG. 3C7

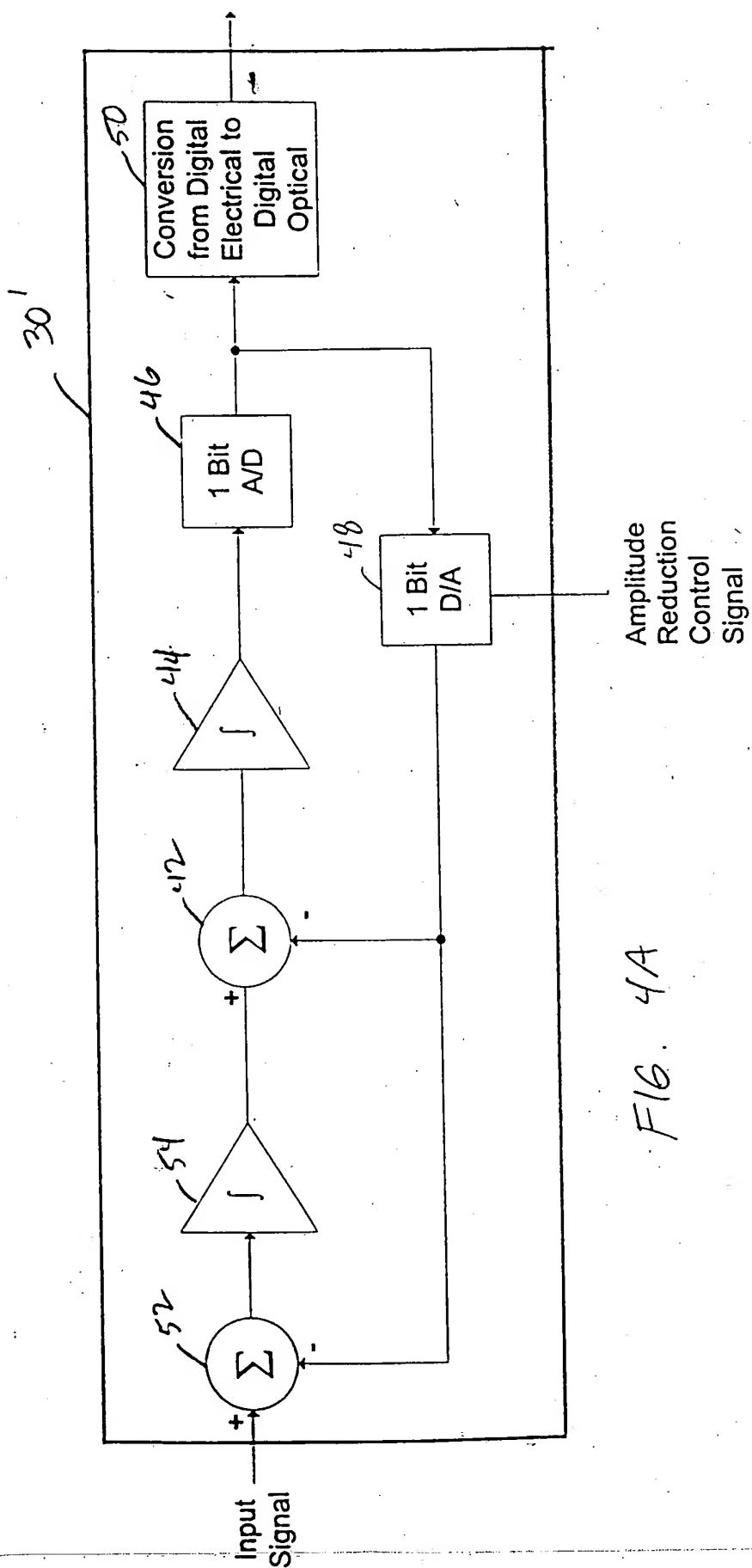
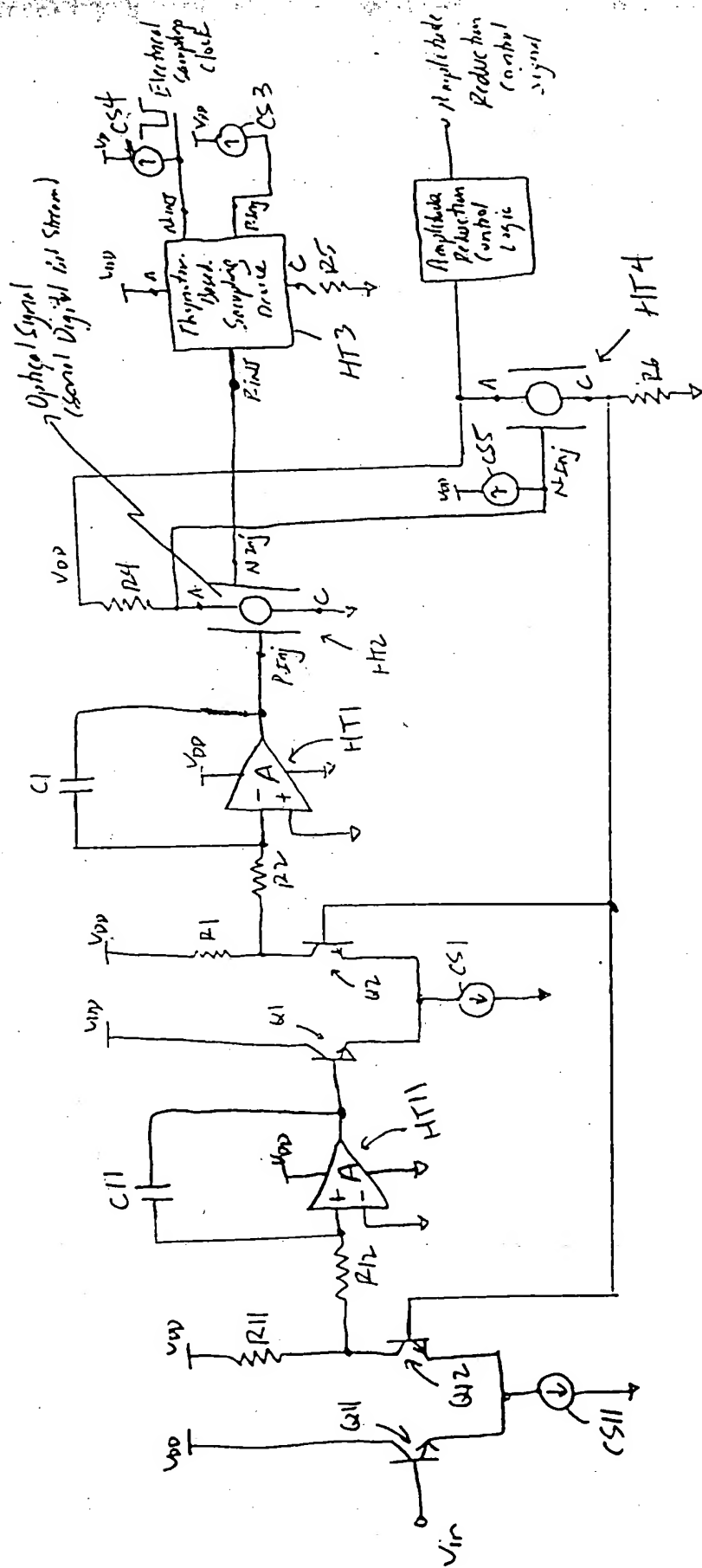


FIG. 4A



F16. 4B1

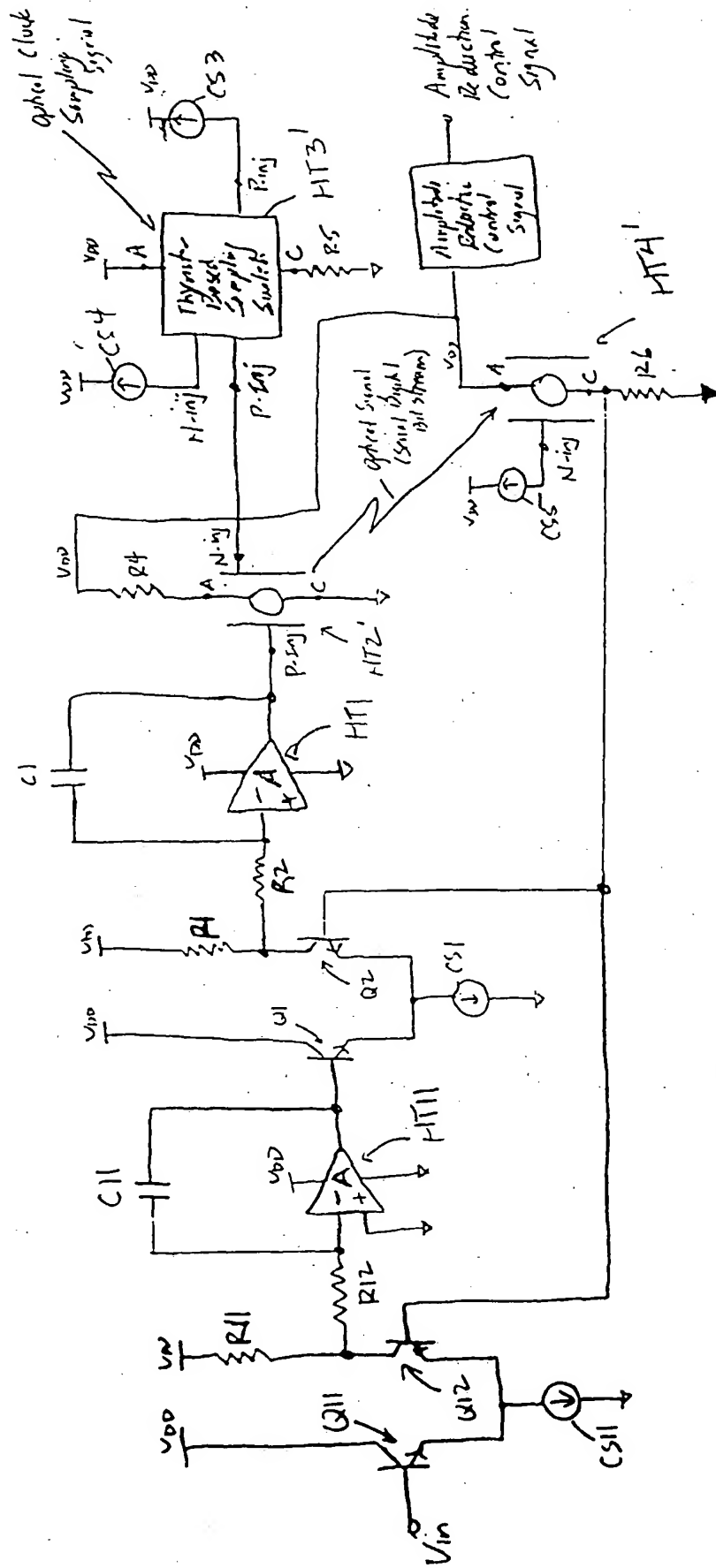


FIG. 4B2

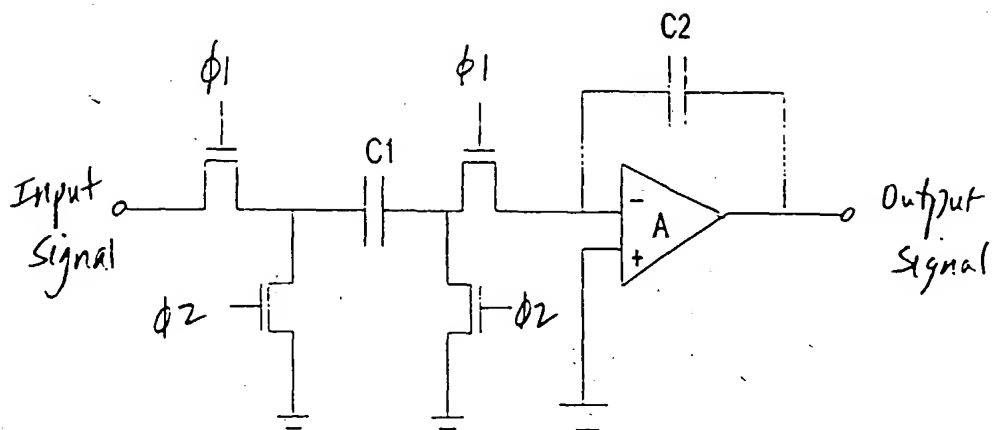
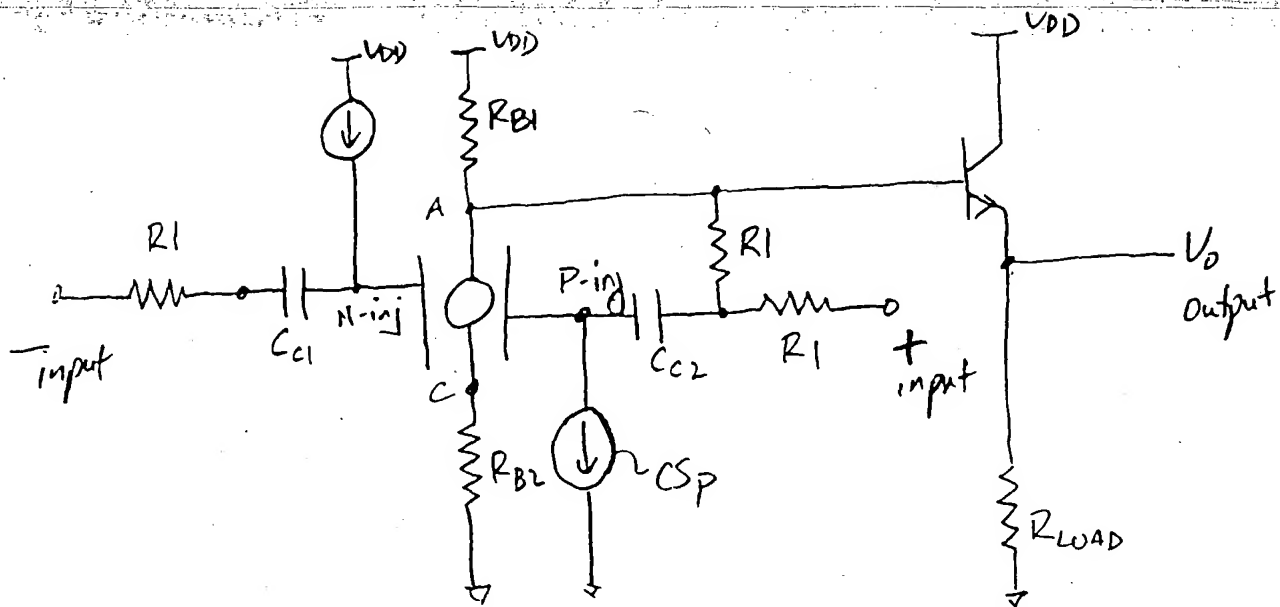


FIG. 4B3



42' (52')

FIG. 4B4

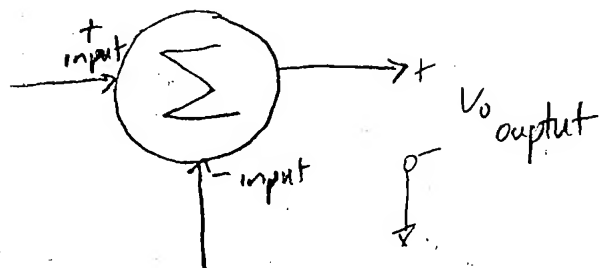


FIG. 4B5

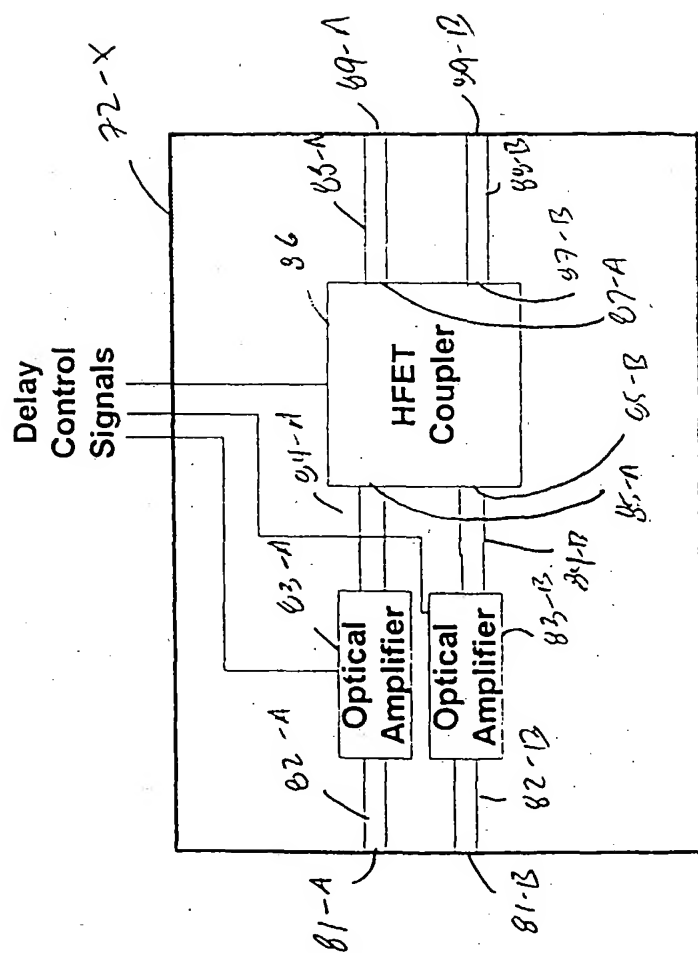
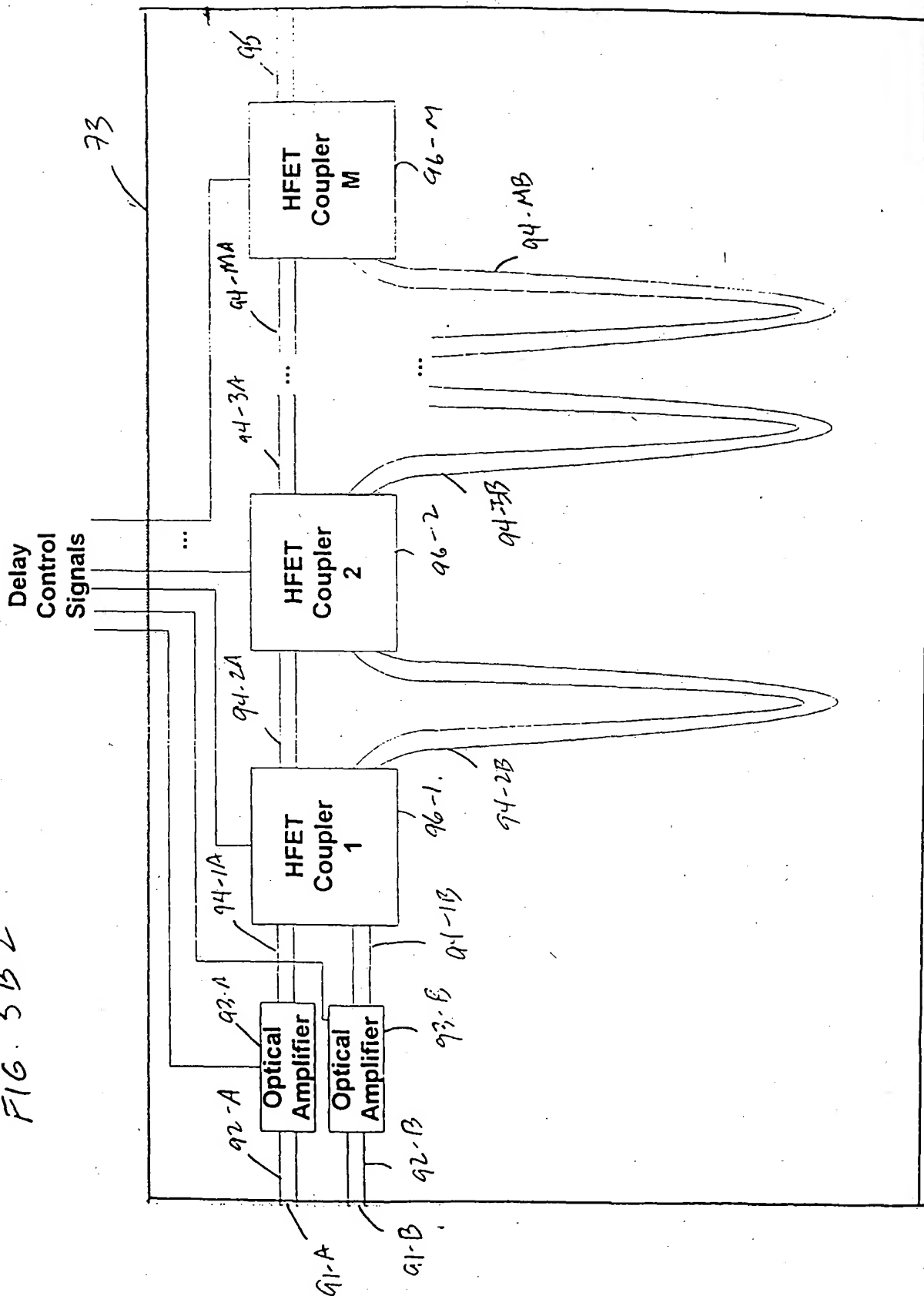


FIG. 5B1

FIG. 5B2



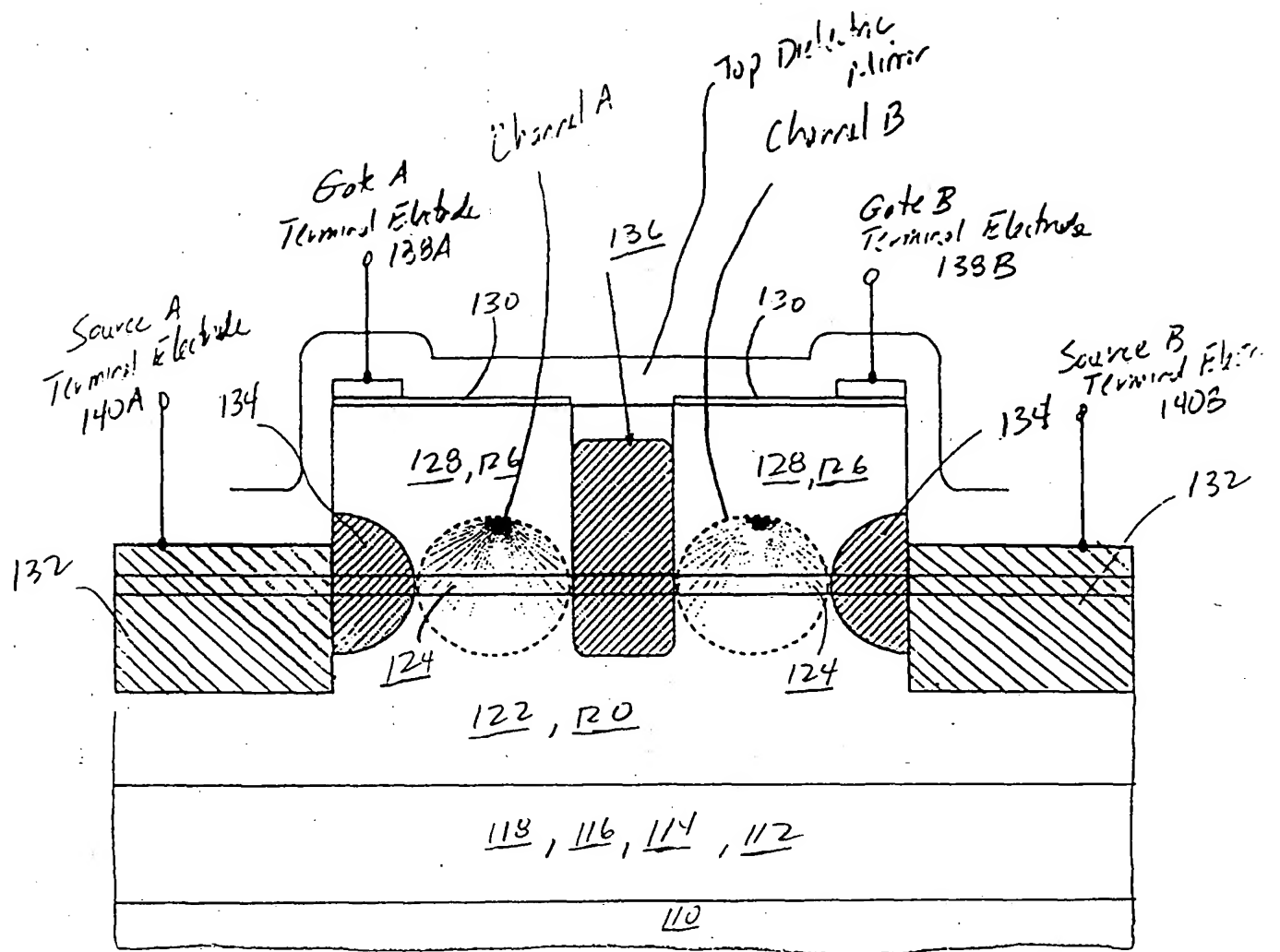


FIG 5C1

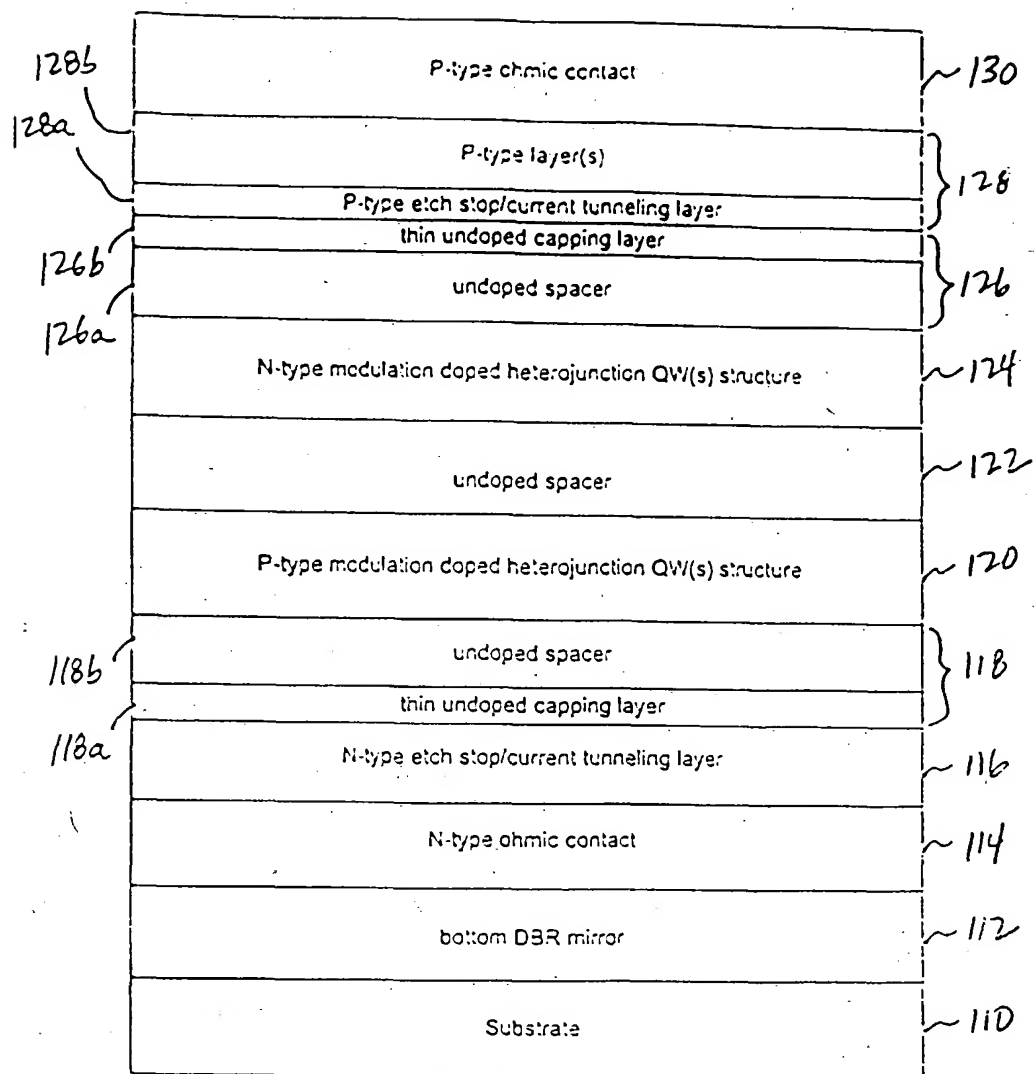


FIG. 5C2

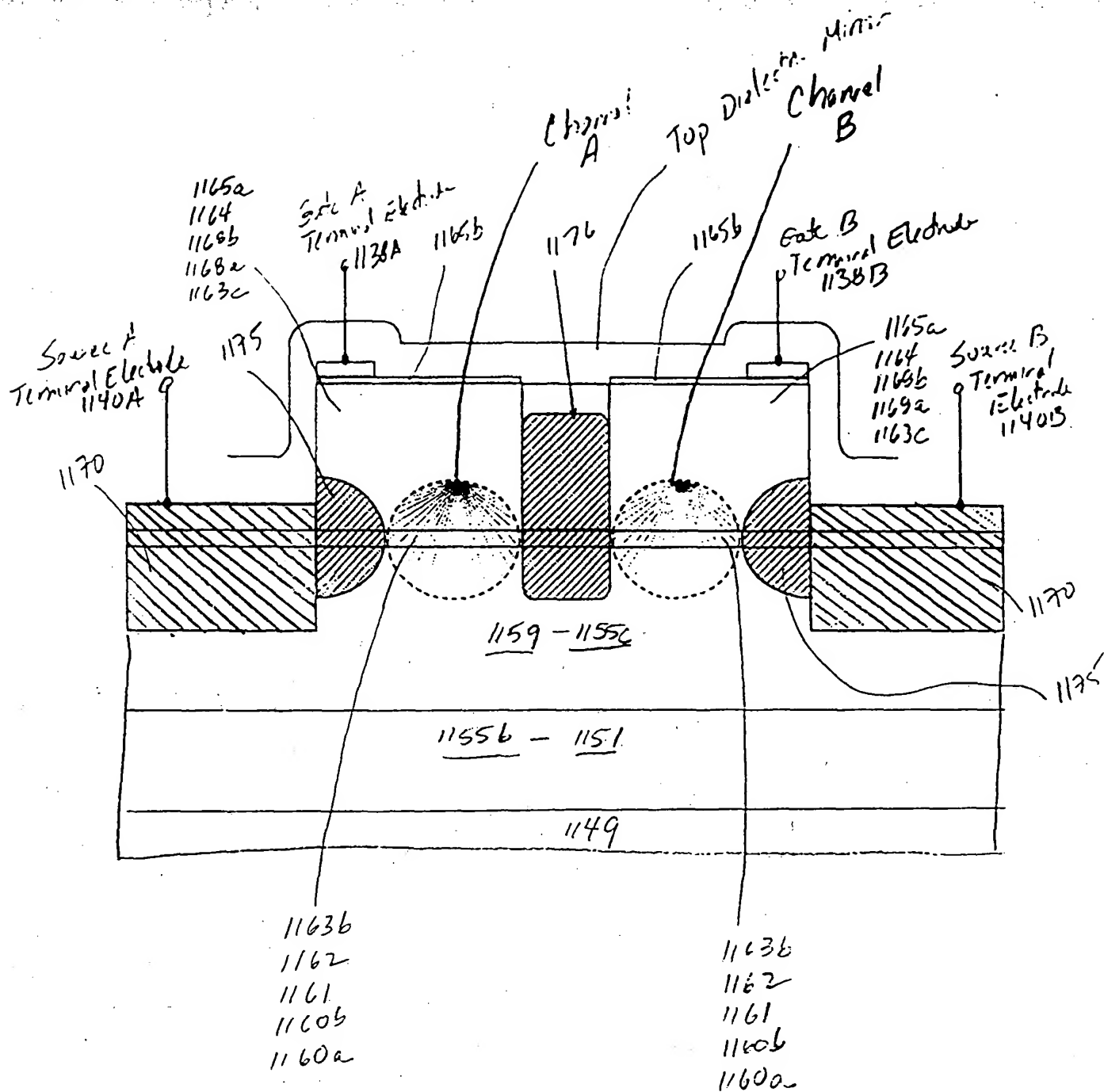


FIG. 5D1

	Layer Material	Layer Doping Type	Typical Doping Concentration (atoms/cm ³)	Typical Layer Thickness (Å)	Layer #
	InGaAs	p-	1E20	25	1165b
128b	GaAs	p-	1E20	75	1165a
	GaAs	c	1.5E17	300	1164
128a	AlAs	p-	3.5E18	>20, <300	1168b
	GaAs	und	und	>6, <20	1168a
126b	Al.15Ga.85As	und	und	200 - 300	1163c
126a	Al.15Ga.85As	n-	3.5E18	80	1163b
	Al.15Ga.85As	und	und	20-30	1163a
	GaAs	und	und	15	1162
	In.15Ga.85AsN } x3	und	und	60	1161
	GaAs	und	und	100	1160b
	GaAs	und	und	100 - 250	1160a
	Al.15Ga.85As	und	und	5000	1159
	GaAs	und	und	250 - 500	1167
	GaAs	und	und	100	1158
	In.15Ga.85AsN } x3	und	und	60	1157
	GaAs	und	und	15	1156
	Al.15Ga.85As	und	und	30	1155d
	Al.15Ga.85As	P+	3.5E18	80	1155c
118b	Al.15Ga.85As	und	und	200-300	1155b
	GaAs	und	und	>6, <20	1166b
118a	AlAs	N+	3.5E18	>30, <200	1166a
	GaAs	N+	3.5E18	1000 - 2000	1153
	AlAs	und	und	1701	1151
	GaAs } x7	und	und	696	1152
	AlAs	und	und	1701	1151
	GaAs Substrate		Si		1149

FIG 5D2

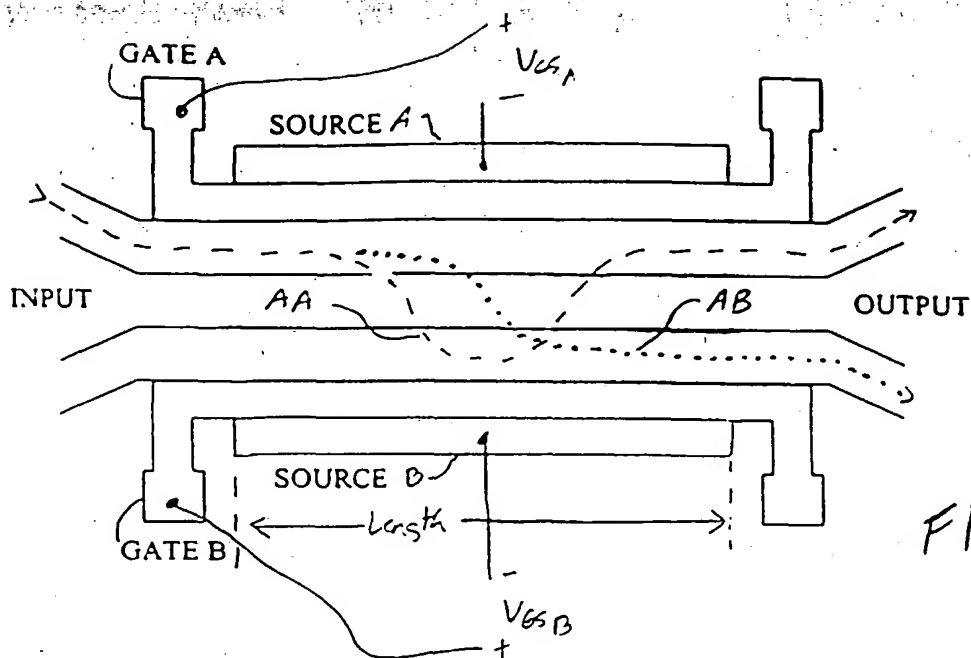


FIG. 5E1

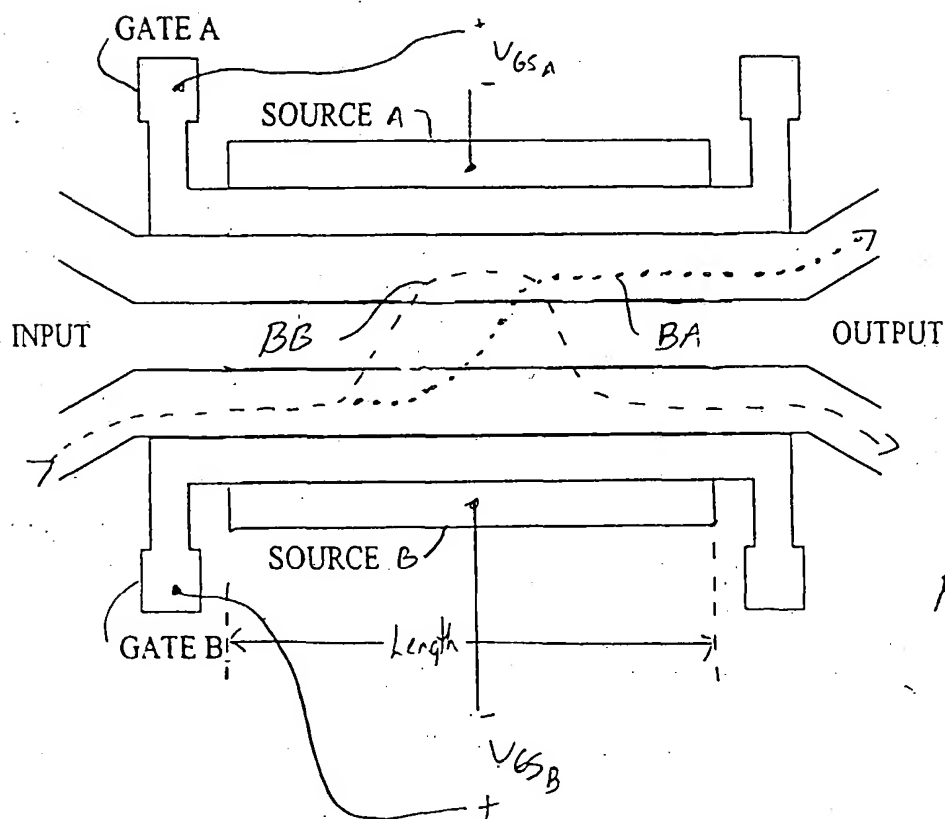


FIG. 5E2

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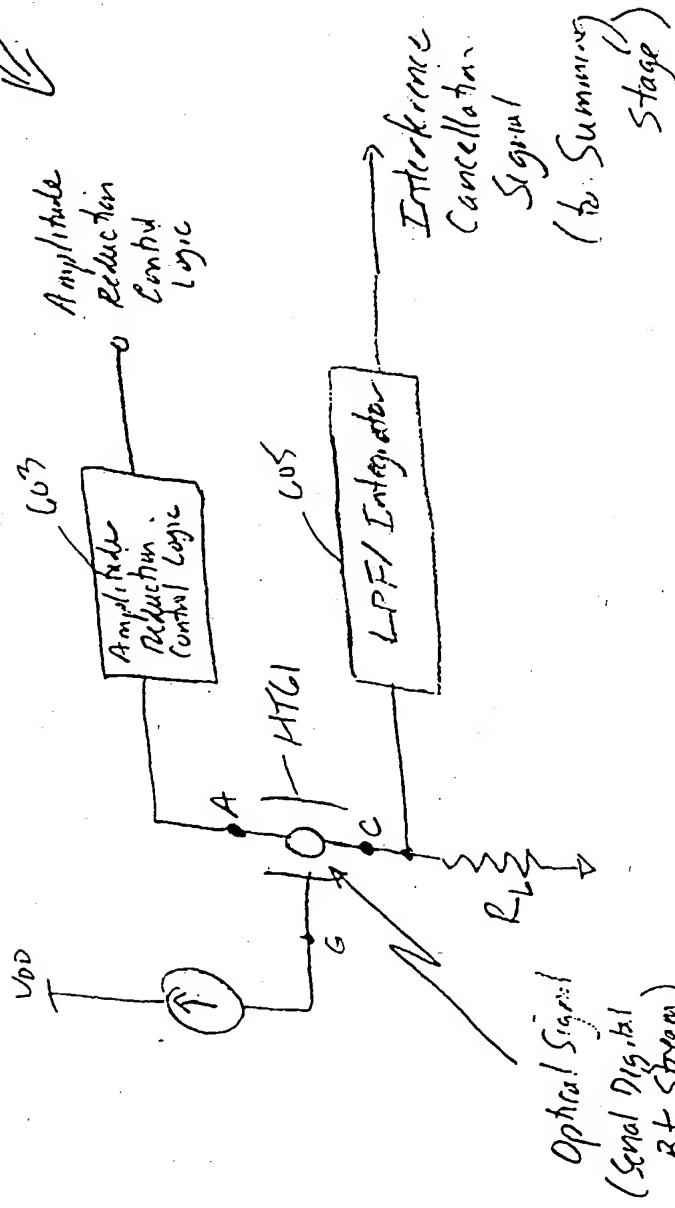


FIG. 6

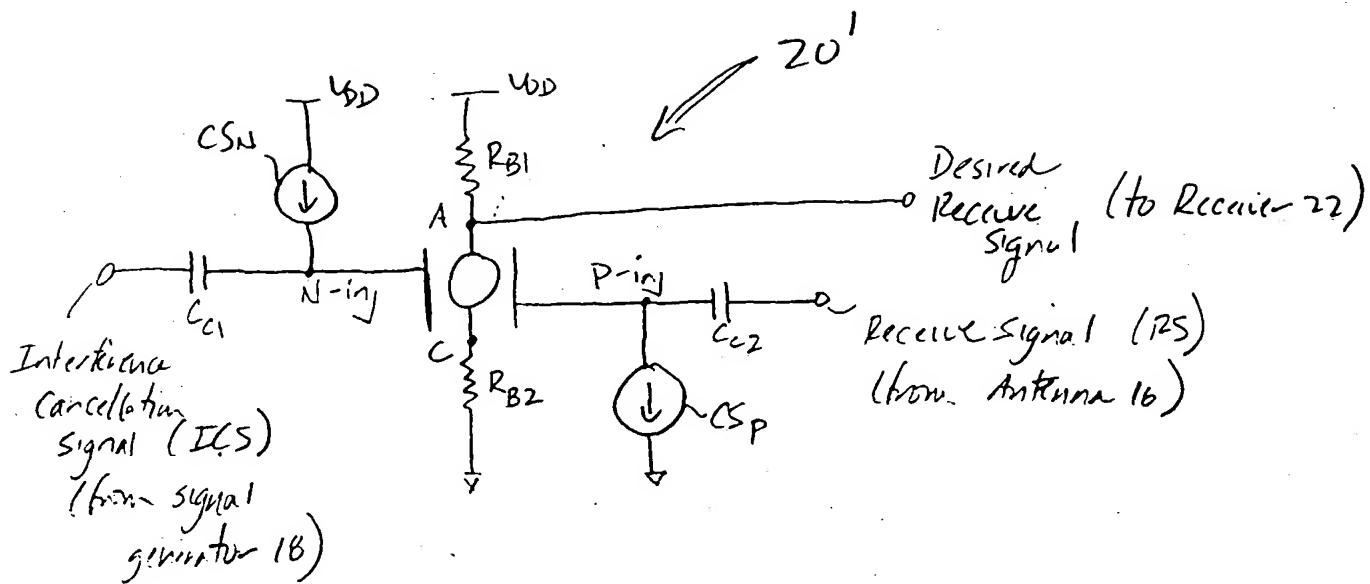


FIG. 7A

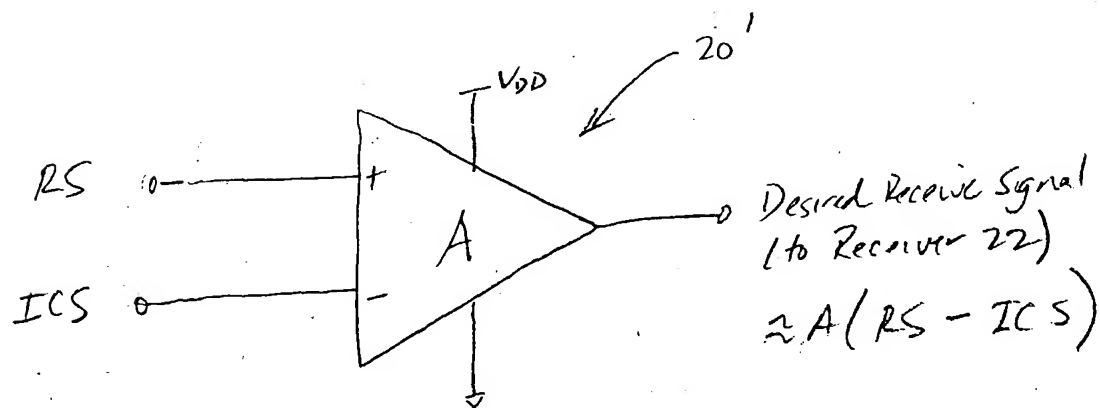


FIG. 7B